

## Data Description for Oyster Growth and Mortality Studies

### General:

The Louisiana Department of Wildlife and Fisheries (LDWF) measures oyster growth and mortality rates in the public oyster grounds by placing Nestier trays at 15 fixed locations in Breton Sound. Twenty oysters are glued to each tray and two trays are placed at each station beginning in January. Monthly observations track the survival of the oysters. Approximately four times per year, shell length measurements are recorded to report growth.

### Data Column Descriptions:

*Station:* Map 2003-04-125.pdf shows the location of the Nestier tray stations. The geographic coordinates of the stations are given in the table below. Stations 19, 20, 21, and 22 were added for a pulse study in 2002.

Station	Latitude	Longitude
001	29° 48' 00"	89° 48' 30"
002	29° 42' 00"	89° 50' 10"
003	29° 42' 00"	89° 47' 15"
004	29° 42' 15"	89° 42' 15"
005	29° 39' 00"	89° 47' 15"
006	29° 36' 30"	89° 47' 15"
007	29° 38' 30"	89° 42' 15"
008	29° 38' 00"	89° 39' 30"
009	29° 34' 30"	89° 42' 15"
010	29° 34' 00"	89° 41' 00"
011	29° 35' 54"	89° 37' 12"
012	29° 30' 30"	89° 38' 15"
013	29° 31' 40"	89° 32' 30"
016	29° 40' 55"	89° 43' 14"
017	29° 39' 28"	89° 44' 33"
018	29° 36' 15"	89° 47' 05"
019	29° 39' 00"	89° 38' 28"
020	29° 37' 15"	89° 41' 18"
021	29° 35' 40"	89° 41' 17"
022	29° 34' 00"	89° 30' 49"

*Date:* mm/dd/yyyy

*Salinity:* Reported in grams per liter (parts per thousand), based on conductivity measurements at the depth of immersion of the Nestier trays.

*Water temperature:* Measured by thermocouple at the depth of immersion of the Nestier trays, in degrees celsius.

*Oyster Number:* Each tray supports twenty oysters, each identified by number.

*Tray:* Each year, LDWF installs two trays, identified as A and B, at each station.

*Card Type:* A “B” card is used to record shell length measurements (“growth”) as well as survival (“status”) data on each oyster. An “A” card records only survival data.

*Oyster Status:* The survival status of each oyster may be recorded as one of the following: “live” (signified by a blank entry), “dead”, “missing”, “silted”, or “vandalized”.

*Month for Status:* This reports the month in which an oyster is first observed dead, missing, or vandalized. The entry persists until the beginning of the next year (when new trays are installed), unless a missing oyster is found or replaced, or a dead or vandalized oyster is replaced. That is, if an oyster is first observed dead in April, every monthly entry through December is “4”. If a tray of oysters missing since April is found in August, the entry only persists through July.

*Growth:* Shell length measurements (hinge to beak) in millimeters. See notice below concerning replacement trays.

*Replacements:* This column reports instances of lost (“missing”) trays being found mid-year, and instances of lost, vandalized, or dead oysters being replaced mid-year. *Users of this data set must apply a complex interpretation to growth data when a dead or lost tray is replaced. One month’s entry applies to two different sets of oysters, the dead or missing tray (“status” and “month for status”) and the new tray (“growth”). Example: In February of 1991, LDWF biologists visited Station 2 and found Tray B missing and replaced Tray B with twenty new oysters. The “status” and “month for status” columns report the original oysters as “missing” and “02” respectively. The “growth” column, however, reports the initial lengths of the new oysters.*